St George Hospital Renal Department – INTERNAL ONLY

Chest pain on haemodialysis

This protocol should be read in conjunction with the CLBR:
CHEST PAIN - NURSING MANAGEMENT OF THE ADULT WITH - SGSHHS
CLIN168

Objective: to initiate treatment at the first sign of chest pain and stabilise patient.

Chest pain – signs and symptoms
All chest pain should be assumed to be of cardiac origin until proven otherwise

- **Verbal**: Patient verbalises presence of pain or discomfort in the chest, neck, jaw, back, shoulder and or arms.
- **Visual**: Patient appears in pain, holding chest, short of breath, diaphoresis, nausea and or vomiting.

Dialysis Management

- Turn off Ultra filtration (UF)
- Decrease blood flow to 200mls/min
- Visually inspect circuit for signs of haemolysis or air (refer to protocols on web).
- Reassure patient and request assistance from fellow team members
- Lie patient flat, feet elevated if able
- Record BP, Pulse, Respirations and O2 sats and document time of pain onset on haemodialysis treatment sheet (see over for documentation guidelines)
- Administer O2 at 4L/min via Hudson mask
- If hypotension is suspected, treat patient for hypotensive episode as per haemodialysis hypotension protocol
- Notify team leader
- Record a 12 lead ECG
- Initiate PACE
- If BP greater than 100mmhg systolic, give ½ of an Anginine tablet (300mcg) sublingual.

**NB Anginine must be administered with great care and close supervision when the patient is on haemodialysis as it will result in a drop in BP**

- Record time of Anginine administration on medication chart and on haemodialysis record sheet
- Take troponin level from arterial port of haemodialysis circuit. Mark urgent on lab request and send to pathology.
- Recheck BP, O2 sats and P 5 mins after administration of Anginine.
- Reassess level of pain.
- Update Team leader of patient’s condition.

**If pain relieved**: no further treatment required at this time. Inform RMO of outcome

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**If pain unresolved** 5 minutes after initial 1/2 sublingual Anginine and if BP greater than 100mmhg systolic, give subsequent dose of ½ sublingual Anginine tablet.

- Record time of Anginine administration on medication chart and on haemodialysis treatment sheet
- Record BP,O2 stats and pulse

**If pain unresolved following the administration of one tablet.**

- Call PACE 2
- Terminate haemodialysis treatment, but maintain access until review by medical team.
- Administer further Anginine as indicated
- Repeat BP and P measurements at 5minute intervals.

**Documentation and follow up**

- Record chest pain assessment on haemodialysis record sheet;
  - Level of pain on 1 to 10 scale
  - Location of pain
  - Type of pain (Dull, Sharp, heavy, tight, tingle, ache.)
  - Does pain radiate? (to jaw, back, neck, arms.)
  - Affected by respiration?
  - Does positioning relieve pain?
- Document event in patient's notes and on RISC.
- ECG must be reviewed by renal team within 2 days even if pain resolves.